

g<sub>1</sub> 17. (Amended) The implant material of claim 28, wherein the bioactive matrix material is composed of a tricalcium phosphate ceramic comprising crystallographically phase-pure  $\alpha$ - or  $\beta$ -tricalcium phosphate ceramic with an interconnecting microporosity of 20-60% of its volume.

g<sub>2</sub> 21. (Amended) A process for the production of an implant material according to claim 28, the process comprising applying the second component in and/or on the first component as a solution in a solvent such that a homogeneous distribution of the second component in and/or on the first component is achieved.

3 24. (Amended) A pharmaceutical composition comprising an implant material according to claim 28, and a pharmaceutically and physiologically acceptable material.

sub h<sub>3</sub> 25. (Amended) A method of treating a disease which affects cartilage and/or bone and/or damage to cartilage and/or bone in a patient in need thereof, the method comprising implanting an implant material according to claim 28, into the patient.

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26. (Amended) A method of use selected from the group consisting of a treatment of a bone defect, a sinus lift, a cyst filling in the jaw region, a bone fracture, a bone replacement, an application in cosmetic and plastic surgery and immobilizing movable bone parts, in a patient in need thereof, the method comprising implanting an implant material according to claim 28, into the patient.

Please add new claims 28 and 29 as follows:

28. An implant material suitable for cartilage and/or bone growth comprising a bioactive matrix material which is composed of a calcium phosphate and applied in and/or on this bioactive matrix a cartilage inducing and/or bone inducing protein or a DNA encoding such protein, wherein the protein comprises a member selected from the group consisting of

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- (a) a protein sequence comprising amino acid 1 to 500, 28 to 500, 361-400 to 500, 381 to 500, 382 to 500, 400 to 500 of SEQ ID NO:1,
  - (b) a protein sequence according to (a) which differs from SEQ ID NO: 1 due to the origin of the protein from other vertebrates but has essentially the same cartilage and/or bone inducing activity as (a),
  - (c) a protein according to (a) or (b) which is a homodimer,
  - (d) a protein according to (c) and a dimer of another protein of the TGF- $\beta$  superfamily, and

- (e) a protein using the same receptor mechanism as a protein according to (c).--

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--29. The implant material of claim 28 wherein the protein comprises a member selected from the group consisting of

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- (a) a protein sequence comprising amino acid 1 to 500, 28 to 500, 361-400 to 500, 381 to 500, 382 to 500, 400 to 500 of SEQ ID NO:1,
  - (b) a protein sequence according to (a) which differs for SEQ ID NO: 1 due to the origin of the protein from other vertebrates but has essentially the same cartilage and/or bone inducing activity as (a),
  - (c) a protein according to (a) or (b) which is a homodimer, and
  - (d) a protein according to (c) and a dimer of another protein of the TGF- $\beta$  superfamily.--
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### REMARKS

Claims 17-29 are pending in this application. By this Amendment, claims 14-16 are canceled, claims 17, 21 and 24-26 are amended and new claims 28 and 29 are added. No new matter is added. New claim 28 is a rewording of now canceled claim 16.

The Office rejects claims 14-27 under 35 USC §112, first paragraph, as assertedly containing subject matter not sufficiently described in the specification.